

## ***Garbage In - Garbage Out: Navigating through Bad Data to Perform Common Grant Accounting Tasks***

**Robert Cohen**

Senior Manager, Higher Education and Academic Medical Centers, Attain, LLC

**Martin Smith**

Manager, Higher Education and Academic Medical Centers, Attain, LLC

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# Agenda

**Item  
No.**

**Description**

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- 1 Introduction and Objectives: Presenters and Session Topics
- 2 Systems and Data Overview
- 3 Impact on Grant Accounting
- 4 Recommendations
- 5 Concluding Discussion

# Introduction and Objectives

# Garbage In - Garbage Out: Navigating through Bad Data to Perform Common Grant Accounting Tasks

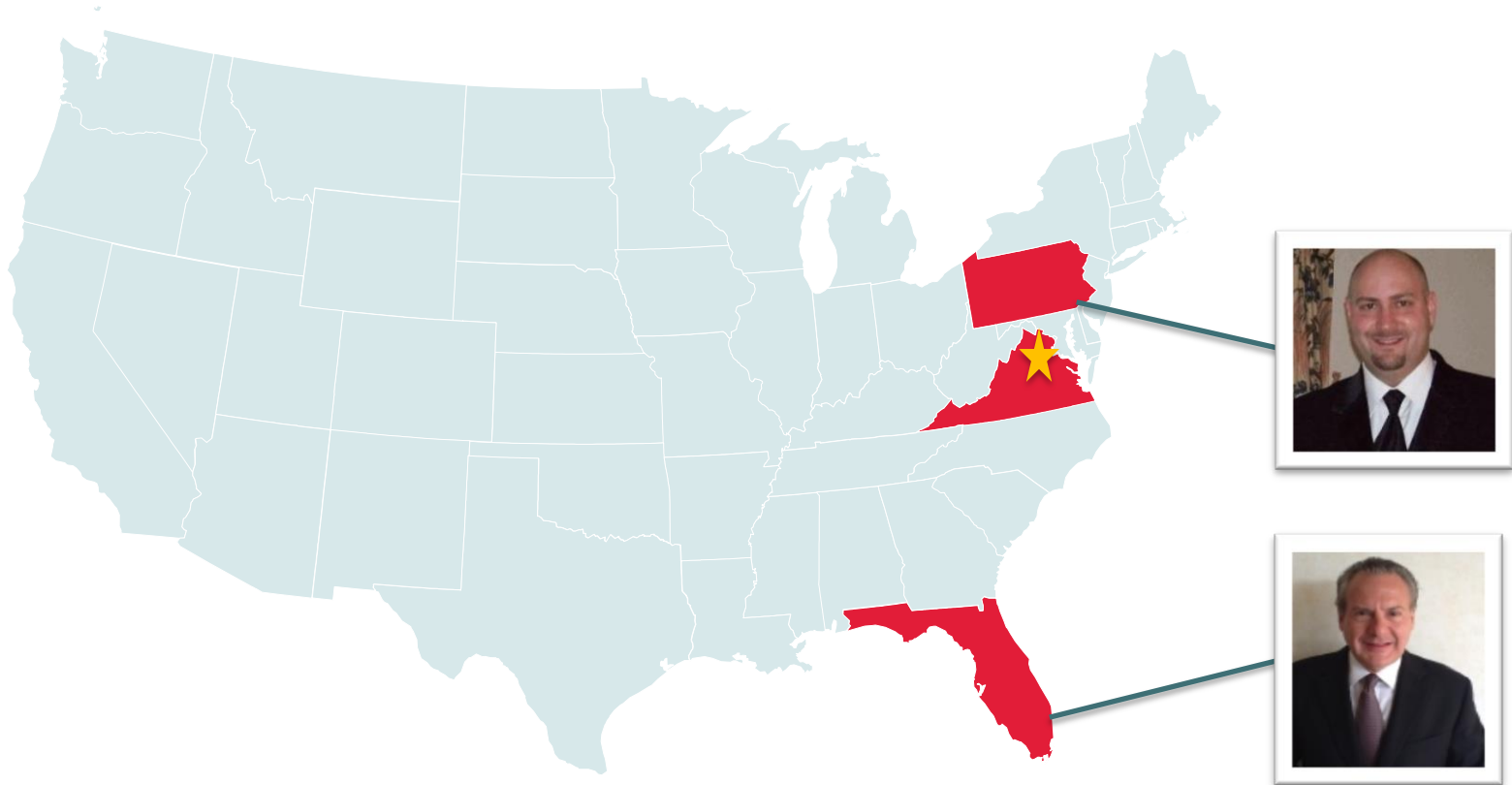
- Grant Accounting introduces numerous complexities not found in everyday general accounting operations.
- The invoicing, accounts receivable, reporting and closeout processes are all impacted by timely transactions and sometimes bad data—either converted or without needed details to reconcile.
- This session will explore common issues impacting proper grant accounting practices and provide useful solutions that can be deployed at your institution

# Garbage In - Garbage Out: Navigating through Bad Data to Perform Common Grant Accounting Tasks

## Learning Objectives:

- Identify key issues impacting proper grant accounting operations;
- Solutions to manage common data issues impeding grant accounting operations; and
- Best practices to manage grant accounts with converted data

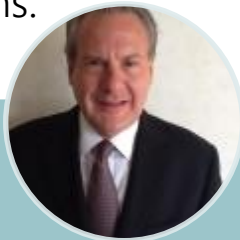
# Today's Presenters: Bob Cohen and Martin Smith



# Presenters and Session Topic

## *Garbage In/Garbage Out: Navigating through Bad Data to Perform Common Grant Accounting Tasks*

- 30+ years experience serving higher education
- Directed Medical School Finance along with Pre-Award and Post-Award operations at 2 NYC Universities.
- Federal Costing and Grants Management for over 25 universities, hospitals and non-profit organizations.



**Bob  
Cohen**

- 13 years experience in Financial Compliance and Post-Award;
- System installations: Financial ERP, Electronic Research Administration, and Effort Reporting Solutions;
- Forensic Accounting Projects
- Organizational Assessments with Policy & Procedure Review and Edits.

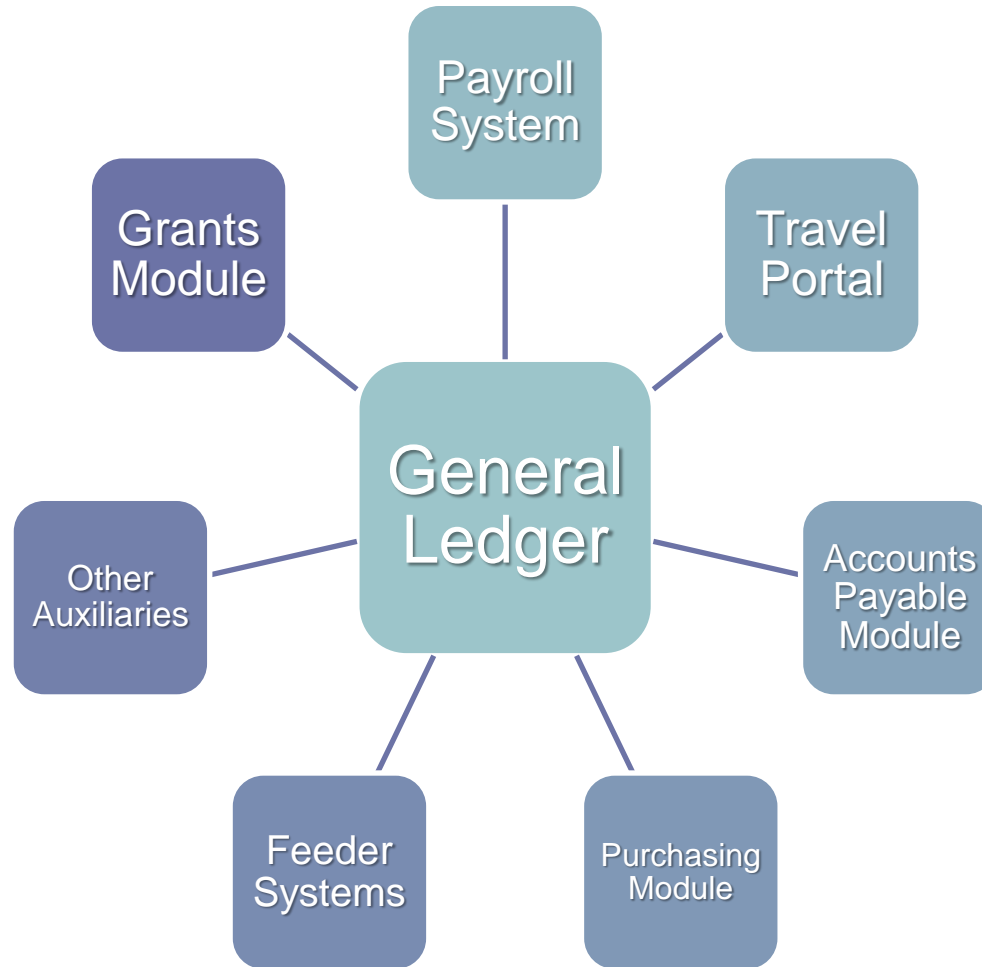


**Martin  
Smith**

# Systems and Data Overview



# General Ledger and Sub-Ledgers or Sub-Systems



# Research Administration IT Functions

Proposal  
Development

IACUC  
Protocol  
Management

IRB Protocol  
Management

Award  
Proposal  
Submission

Set-up New  
Award Account

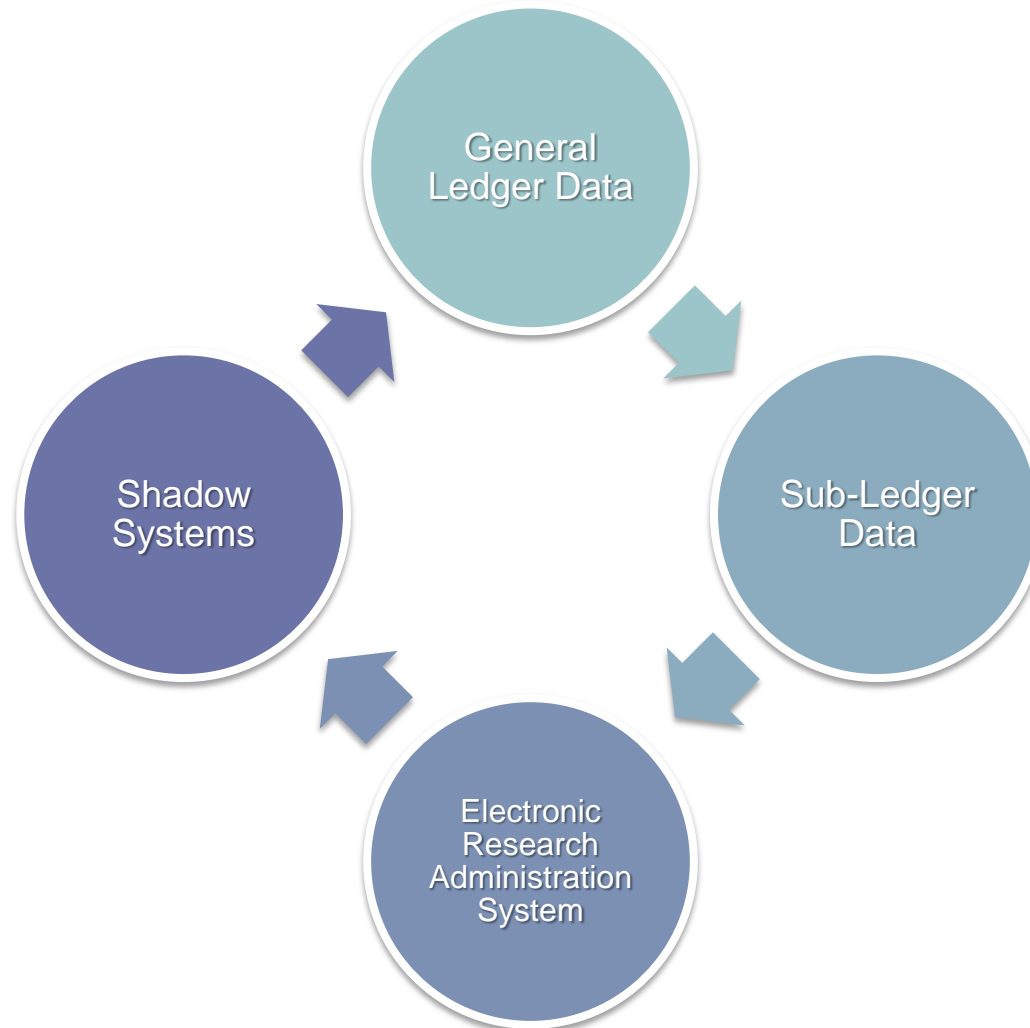
Approve HR  
Actions

Approve  
Payroll  
Allocations

Sponsor Billing  
Systems

Financial  
Reporting

# Systems to Manage Sponsored Awards



# Advantages of Information Technology Solutions

## Legacy Systems

- “Clunky” Workflow
- Limited Functionality
- Storage Limits impacting length of fields and number of corresponding attributes
- No Custom Reporting Capabilities
- Pending obsolescence

## Enterprise Resource Planning Systems (ERPs)

- Sophisticated Accrual Accounting
- Integrated Enterprise-wide functionality
- Tough to get at data
  - Need for custom reports (built by developers)
  - Data warehouse is necessary companion to ERP.

# Opportunities with Technology

## **Projecting Project-related Costs**

- Payroll costs
- Purchase order commitments
- User-defined memorandum entries

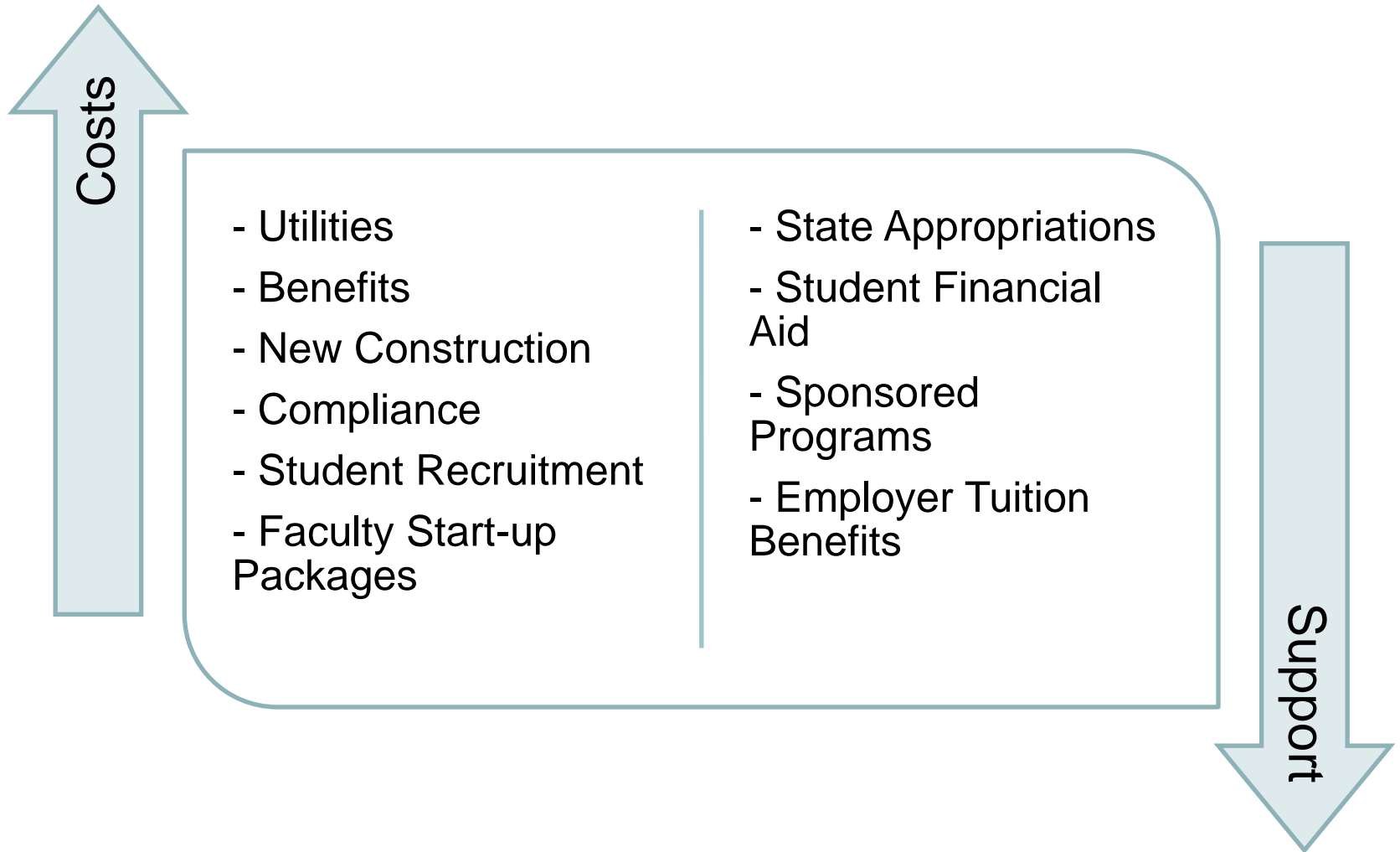
## **Reconciling the Award Account**

- Budget-to-Actual Award Spending
- Fund Balance:
  - $\text{Cash Received} + \text{Accounts Receivable} = \text{Revenue} = \text{Costs}$

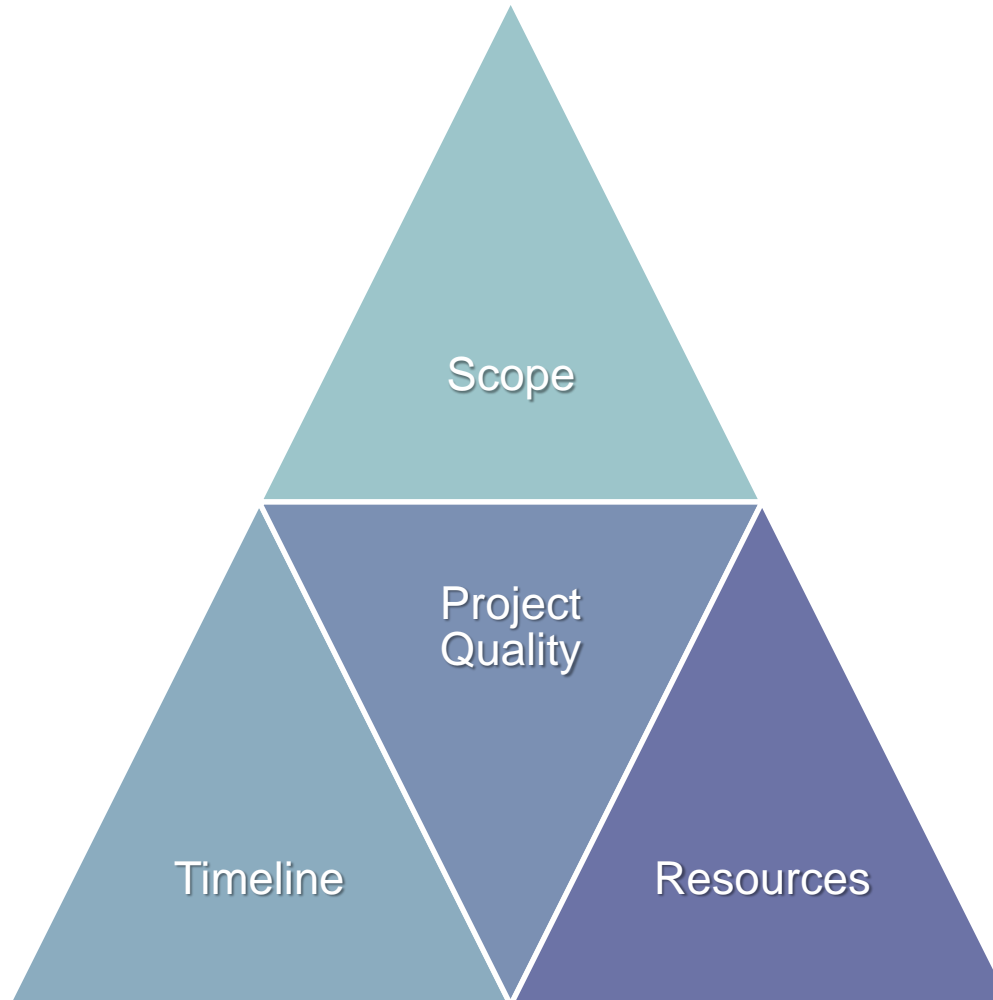
## **Compliance Action-Oriented Reporting**

- Payroll % Charged vs. Effort Commitment % vs. Effort % Certified
- Object Codes, Commodity Descriptions or Vendors for Allowability
- Timeliness of transactions via Cost Transfer or in relation to End-Date

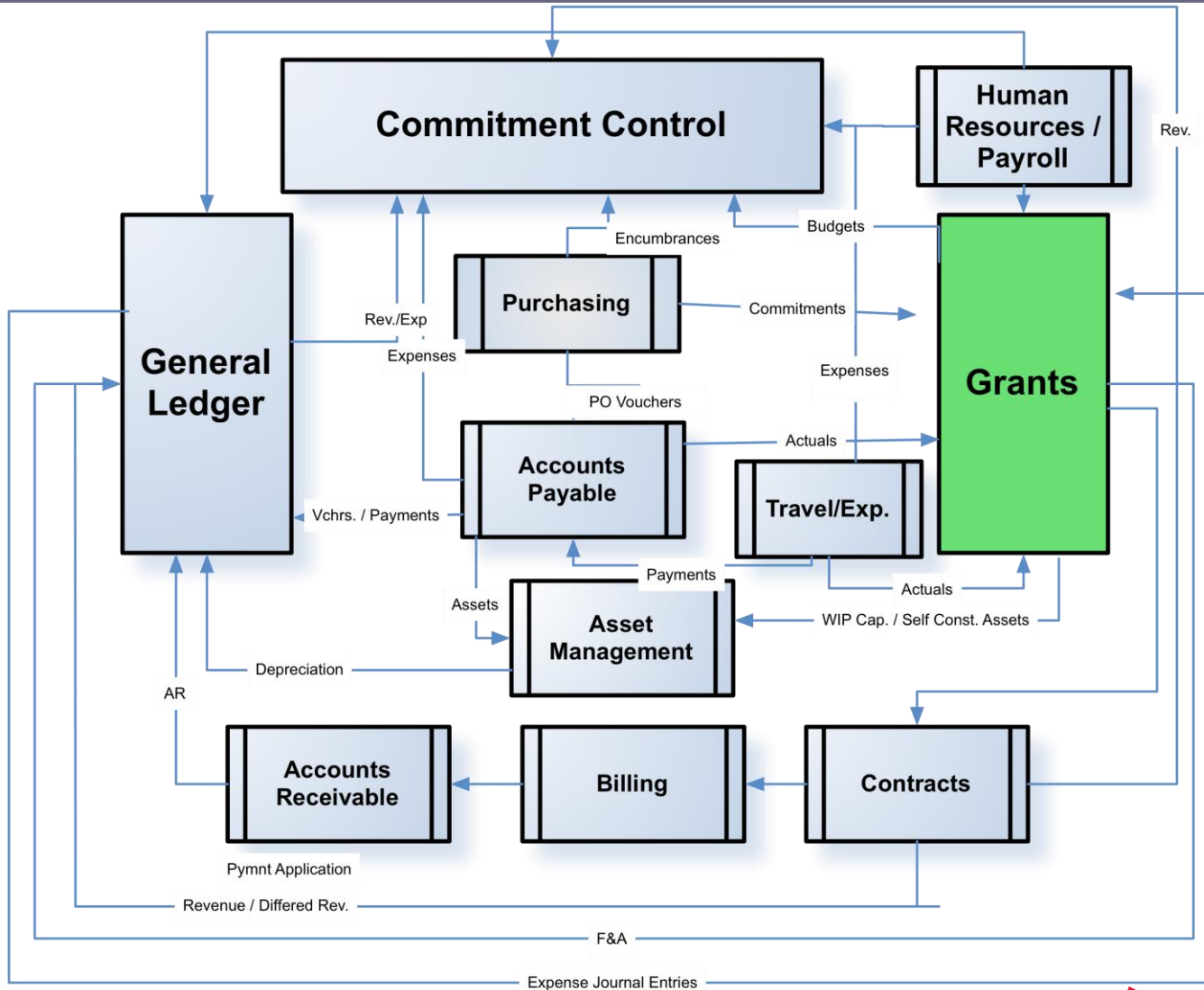
# Financial Environment Affecting IT Budgets



# Implications of Financial Constraints on IT Projects

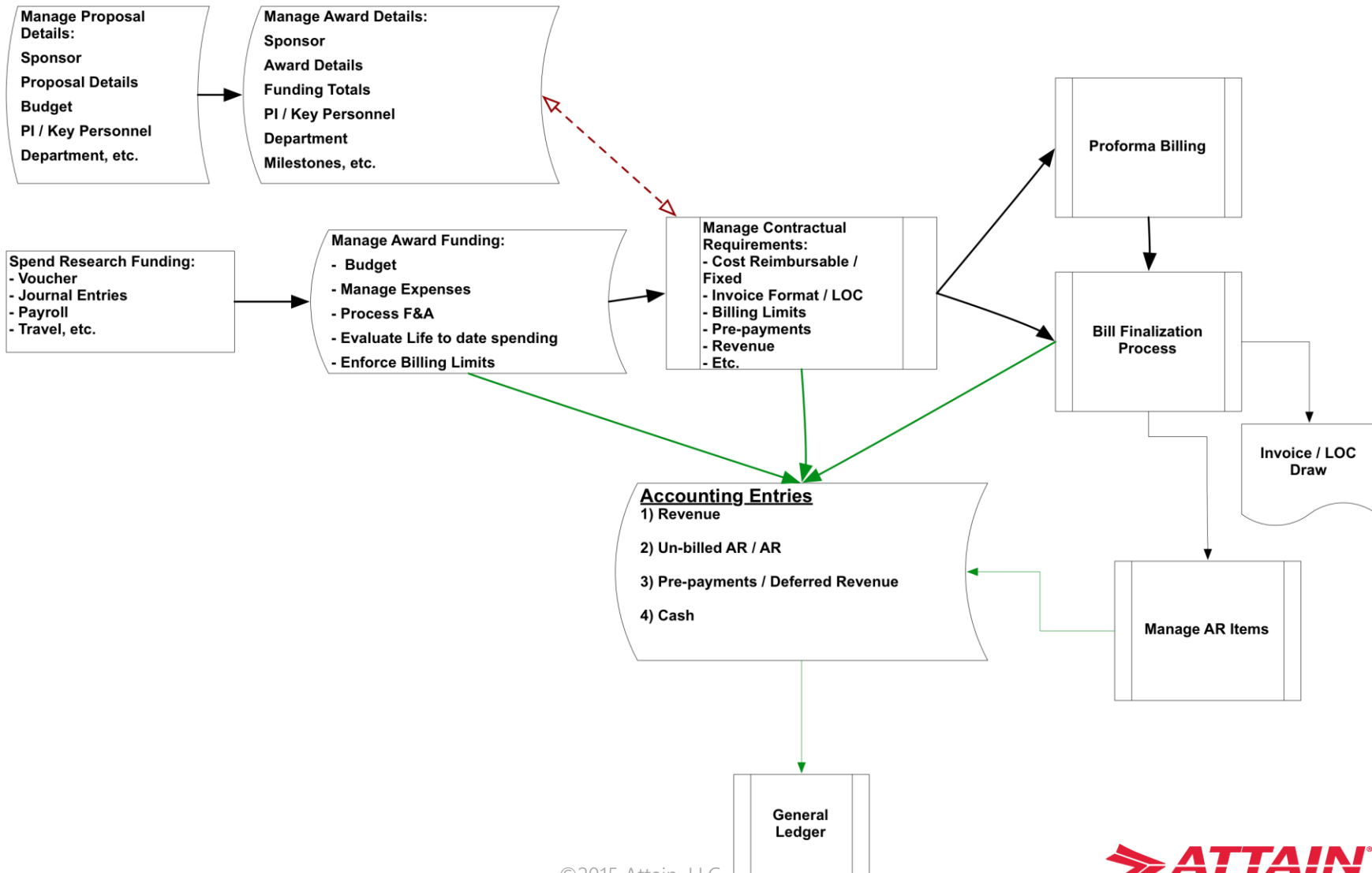


# PeopleSoft Financials System

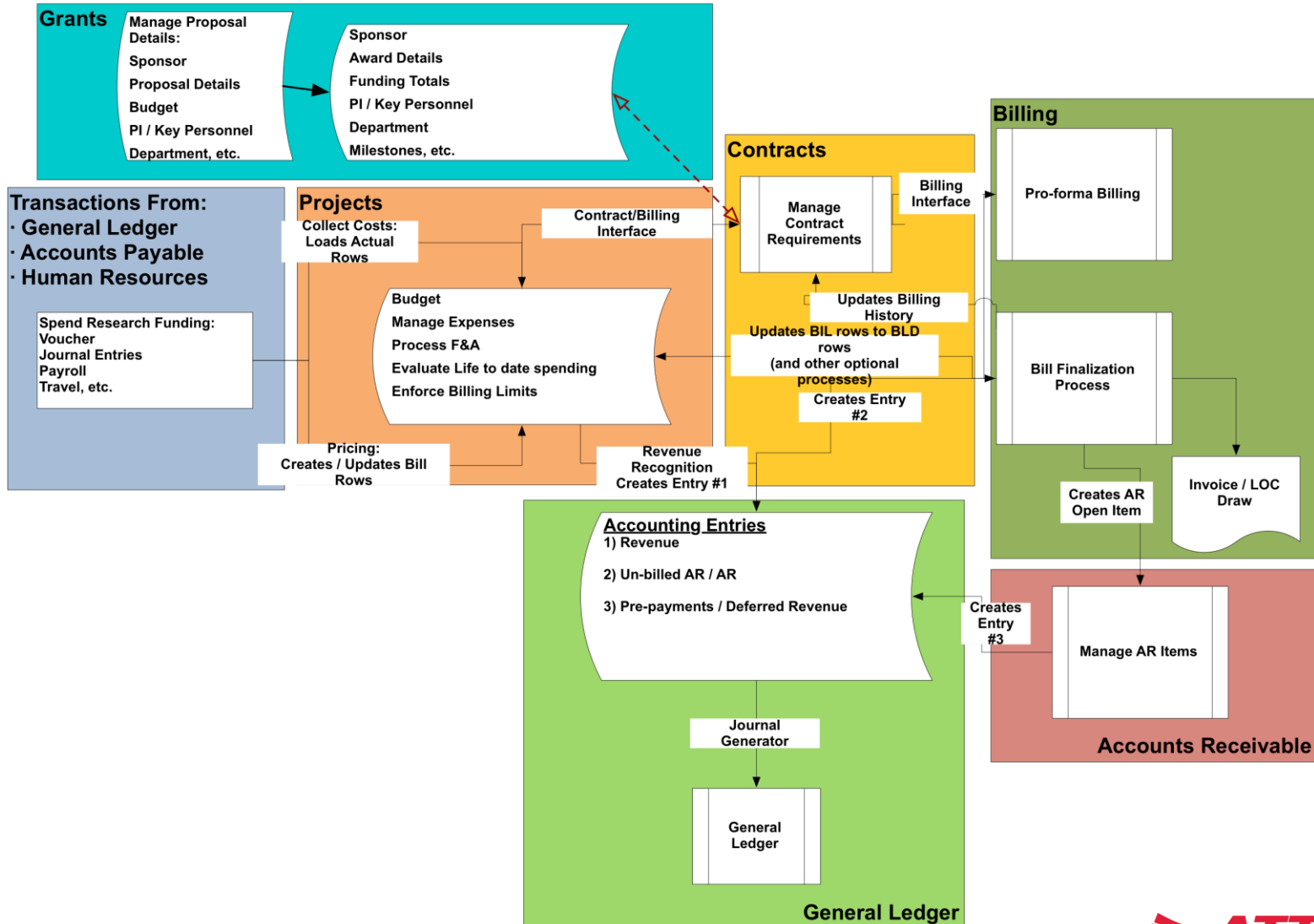




# Award Business Process Flow




# Award Functions by Module



# Data Issues

# What makes “data” become “bad data”?



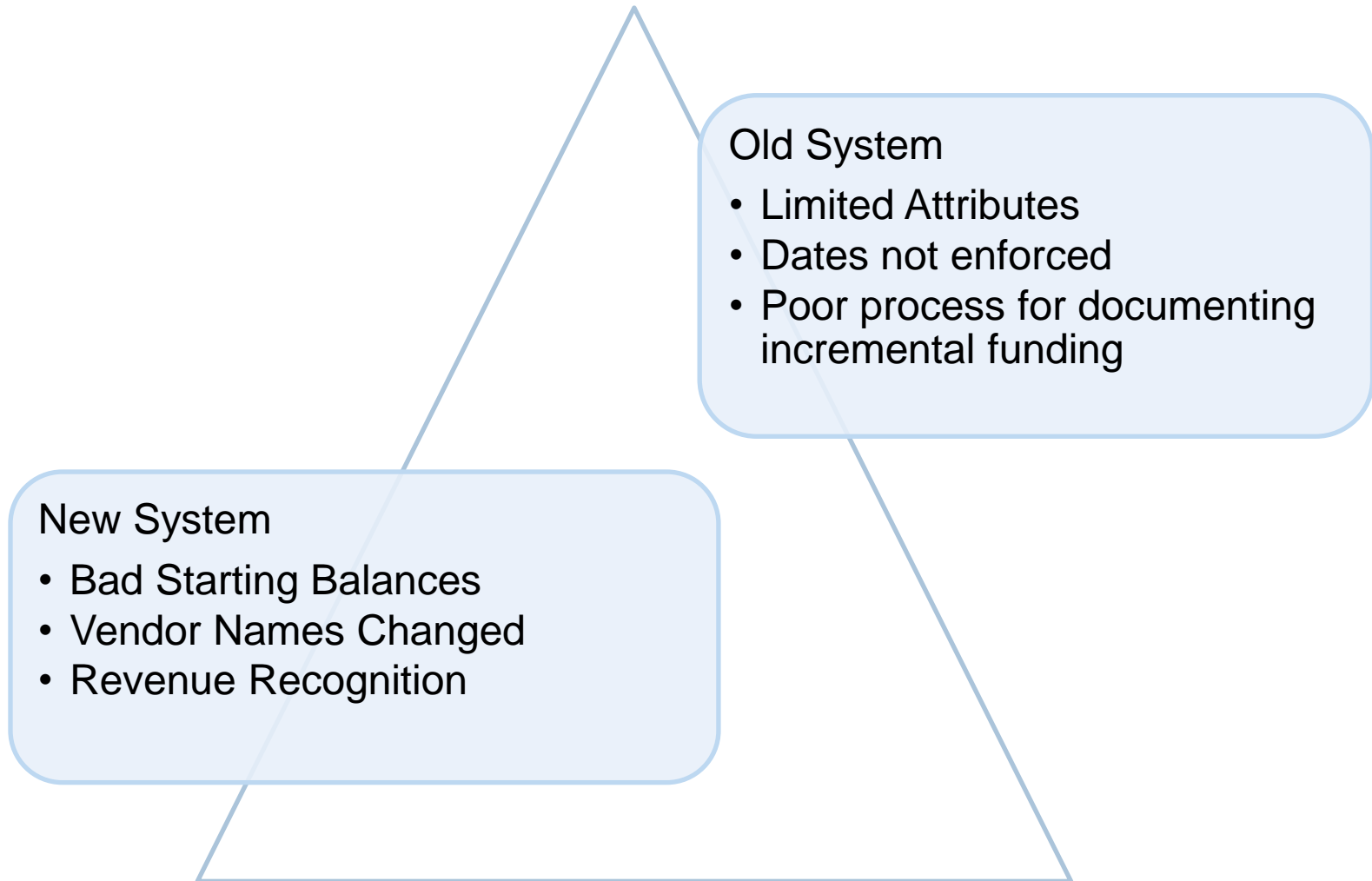
Sub-ledgers become out-of-sync with the General Ledger because of cost transfers and/or lack of a credit process.

Referential integrity is lost during conversion because of new data relationships and tables.

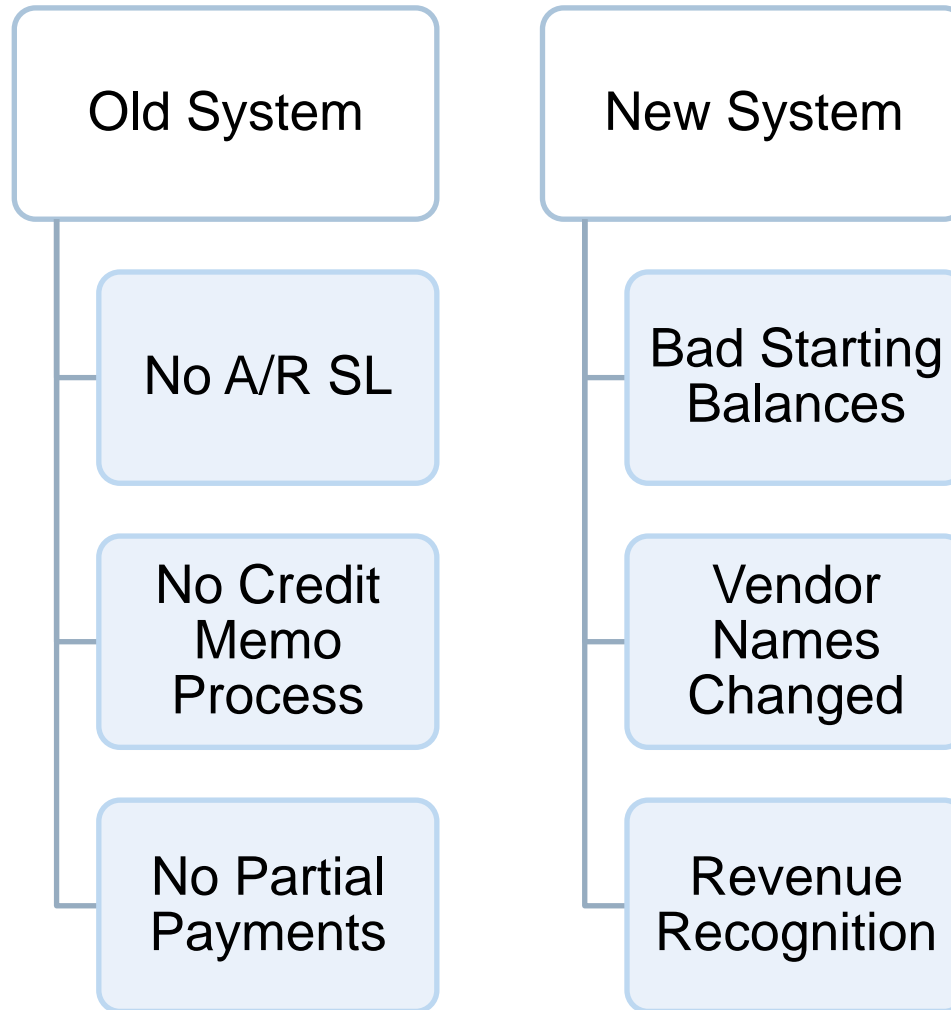
New data attributes did not exist in old system and are populated with bad data, dummy data, or left blank.

Only summary information is converted when detailed information is needed.

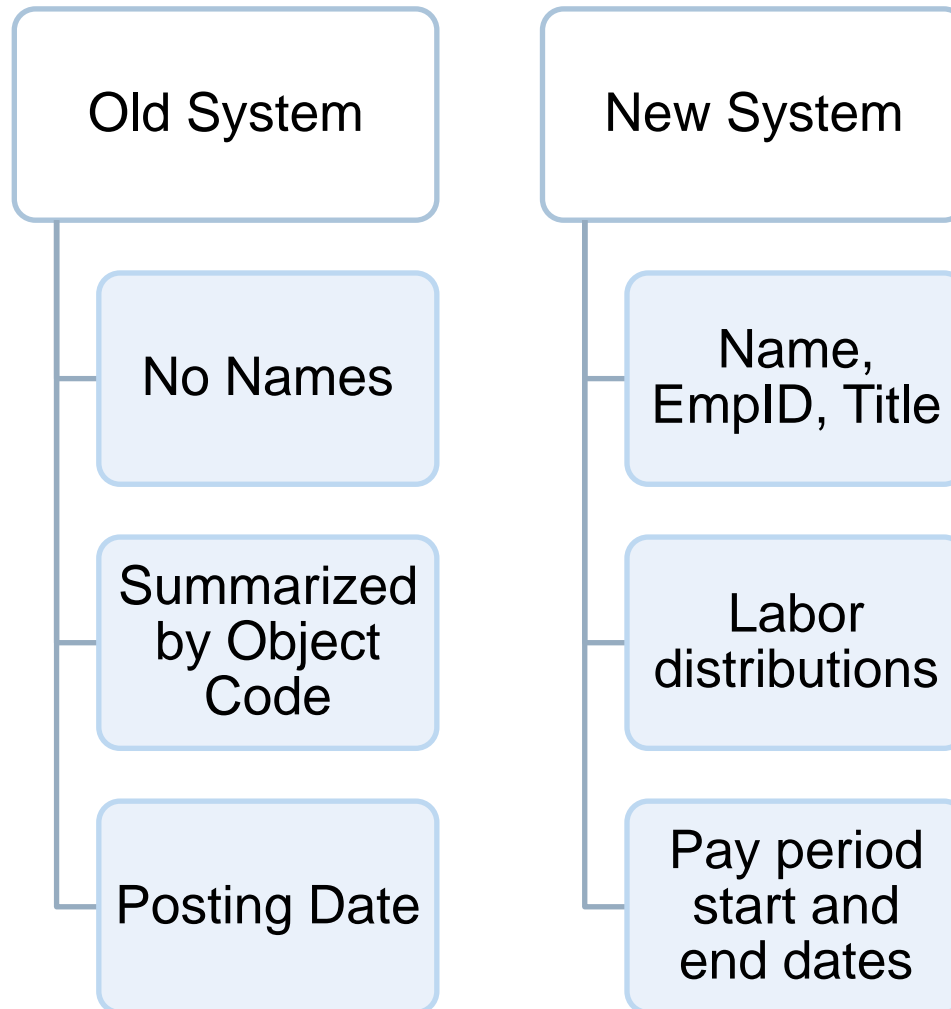
# Account/Project Information



# Accounts Receivable Ledger



# Payroll Data



# Other Data Issues

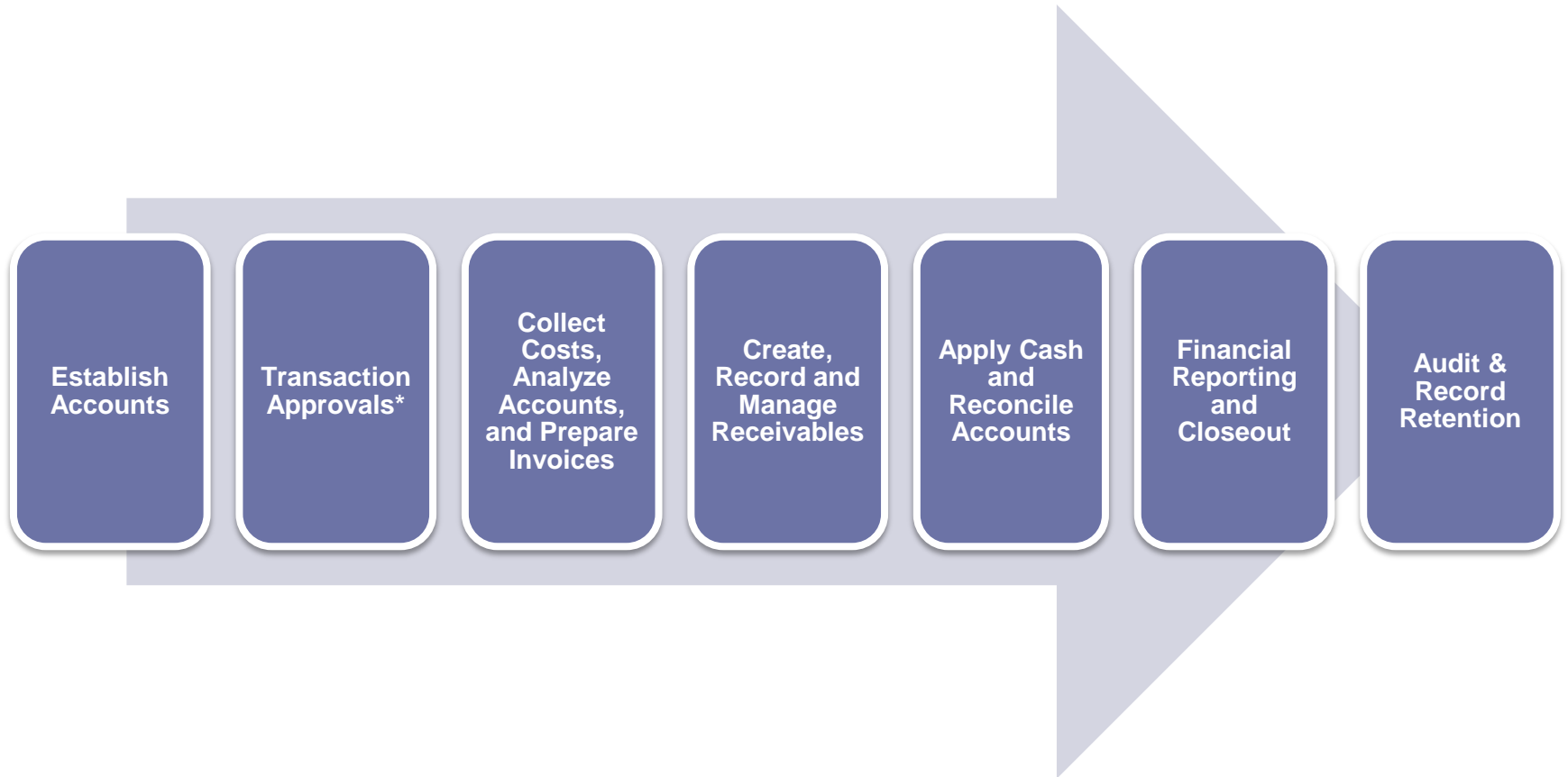
## Old System

- Manual F&A and FB Calculations
- Posting Date and No Original Transaction Date
- Cash Basis
- Business Organization not documented in Chart of Accounts (COA)



# The Impact on Grant Accounting

# Typical Grant Accounting Functions



# 1. Day-to-day Post-Award Transaction Approvals

## **Issues and Opportunities:**

- Involving the right people in the requisition with an eye for compliance concerns;
- Awareness of the proper actions to justify a transaction;
- Inclusion of the principal investigator at the requisition stage;
- Paper vs. Electronic processing;
- Oversight by central post-award office.

## **System or Data Issues:**

- Converted transactions do not have Sub-ledger detail;
- Security roles for transaction processing not well thought out and hampers good customer service.

## 2. Allocation of Costs

### **Issues and Opportunities:**

- Adherence to OMB Uniform Guidance (2 CFR 200);
- Thoughtful analysis on the front-end;
- Accounting system having the ability to add multiple accounting lines;
- Requirements because of input from approving offices;
- Planning at local level;
- Unlike circumstances being justified.

### **System or Data Issues:**

- Electronic processing missing documentation requirements for allowability;
- Converted encumbrances may not be correct.

## 3. Cost Transfers

### **Issues and Opportunities:**

- Correction of errors or potentially “gaming the system” to manipulate costs;
- Circumstantial evidence refutes the best of justifications;
- How and why the error occurred (if applicable);
- Determining whether costs will benefit intended project;
- Addressing timeliness when 90+ days out;
- Correcting systemic issues rather than allowing the problems to persist.

### **System or Data Issues:**

- GL Journal Entries outside of a Sub-ledger credit process will contribute to SL to GL account reconciliation issues;
- Reports and Queries need to be defined for the end-users to encourage account analysis and eliminate the need for cost transfers.

# 4. Payroll Allocation and Reallocations

## **Issues and Opportunities:**

- Prospectively planning activities before charging the awards;
- Reallocating in a timely fashion;
- Arduous process requiring paper copies and numerous signatures or streamlined electronic process;
- Managing effort commitments when reallocating;

## **System or Data Issue:**

- Creates downstream compliance concerns and payback risk (via audit) or unfunded research (i.e. unbillable costs if unallowable);
- Parking costs delays cost reimbursement whereby institution is funding those costs (if charged to unrestricted account) or another sponsor paying for those costs (if charged to another sponsored award);
- Timeliness of Payroll Reallocations done after-the-fact at Closeout pose significant audit risk.

# 5. Invoicing

## **Issues and Opportunities:**

- Frequency of invoicing routines;
- Collecting all costs billed;
- Costs staying on the projects for which were billed;
- Cash draw-downs vs. detailed billing requirements.

## **System or Data Issue:**

- Were proper bill plans designed?
- Are exceptions such as credit memos, cancelling invoices, and managing A/R built into the system requirements?
- Switch from Cash-basis to Accrual Accounting will likely pose revenue recognition issues.

# 5. Invoicing

## Type of Agreement

- Cost Reimbursable
- Fixed Fee for Service

## Method

- Prepayment
- ACH
- LOC
- Paper Invoice

## Frequency

- Monthly
- Quarterly
- Milestone
- Combination



# 6. Revenue Recognition

## **Issues and Opportunities:**

- System generated Revenue entries;
- Advance payments and Deferred Revenue;
- Credit Memo process when costs have been relieved from the project;
- Managing milestone payments;
- Distributed invoicing not involving central grant accounting office.

## **System or Data Issue:**

- Design appropriate Revenue Recognition codes;
- Closed award should reflect final invoice and be deactivated.

## 6. Revenue Recognition

### Balance Sheet Accounts

Cash (Asset)

Deferred Revenue (Liability)

### Income Statement Accounts

Revenue

Expense

# 6. Revenue Recognition

## Prepaid Award

Cash Received at Contract Execution \$50,000

Debit Cash \$50,000

Credit Deferred  
Revenue \$50,000

Costs Incurred \$15,000

Debit Project  
Expense \$15,000

Credit Payables  
\$15,000

Invoice Process

Debit Deferred  
Revenue \$15,000

Credit Revenue  
\$15,000

# 6. Revenue Recognition

## Cost Reimbursable Award

### Contract Executed

No General Ledger Entry Required

### Costs Incurred \$30,000

Debit Project Expense \$30,000  
Credit Payables \$30,000

### Invoice Process

Debit Accounts Receivable \$30,000  
Credit Revenue \$30,000

### Apply Payments

Debit Cash \$30,000  
Credit Accounts Receivable \$30,000

# 6. Revenue Recognition

## Combination of Prepayment and Cost Reimbursement

Cash Received at Contract Execution \$10,000 (\$50,000 Award)

Debit Cash  
\$10,000  
Credit Deferred  
Revenue \$10,000

Costs Incurred \$15,000

Debit Project  
Expense \$15,000  
Credit Payables  
\$15,000

Invoice Process

Debit Deferred  
Revenue \$10,000  
Debit Accounts  
Receivable \$5,000  
Credit Revenue  
\$15,000

Apply Payments

Debit Cash \$5,000  
Credit Accounts  
Receivable \$5,000

# 7. Accounts Receivable

## **Issues and Opportunities:**

- Managing a true aging report;
- Types of sponsors outstanding;
- Roles and responsibilities—who manages A/R for sponsored programs?;
- Writing down receivables;
- Creating an Allowance for Uncollectable Accounts;
- What works best?

## **System or Data Issue:**

- Managing receivables is the companion to proper invoicing as collection of cash makes the institution whole for the sponsored award activities—this requires a true A/R aging report with clean data.
- Closed award should not have open A/R nor should residual balances be transferred if cash is due to the institution.

# 8. Cash Management

## **Issues and Opportunities:**

- Correct application of cash;
- Detailed information on invoice;
- Clear instructions to sponsors to ID payments;
- Following up when the checks do not match invoice information;
- Use of a clearing account;
- Impact on cash operations.

## **System or Data Issue:**

- Applying cash is the last step in the Invoicing/Accounts Receivable/Cash process and a key data element when analyzing Project Revenue and Billed Amounts;
- Misapplied Cash will influence final account reconciliation at Closeout.

# 9. Account Reconciliations

## **Issues and Opportunities:**

- Projecting costs through the end of the award
- How frequently to monitor
- Defining roles and responsibilities to avoid blame at closeout when awards are under or over spent
- Key costs to focus on
- Monitoring transactions
- Timing of transactions

## **System or Data Issue:**

- This is the single-most overlooked yet important component to proper award financial administration as it impacts analysis of available balances to proper invoicing and fund balance entries;
- Must agree with final costs claimed at Closeout.
- Various queries are recommended to manage the process.



# 10. Effort Reporting

## **Issues and Opportunities:**

- Impact on invoicing when changes are made to periods already invoiced;
- Proper certifiers;
- Ability to reallocate after-the-fact;
- Key personnel;
- Certifying effort not payroll confirmation

## **System or Data Issue:**

- Creates downstream compliance concerns and payback risk (via audit) or unfunded research (i.e. unbillable costs if unallowable);
- Parking costs delays cost reimbursement whereby institution is funding those costs (if charged to unrestricted account) or another sponsor paid for those costs (if charged to another sponsored award);
- All effort commitments made to the sponsor (paid and cost-shared) must be met and documented at Closeout.

# 11. Financial Reporting

## **Issues and Opportunities:**

- Managing deadlines
- Increased reporting requirements and burden on operation
- Disclosing information that reconciles to awards and prior financial reports

## **System or Data Issue:**

- Are non-billing milestones recorded in the new ERP system?
- Figures reported on financial reports should agree with costs incurred and invoiced at Closeout.

# 12. Closeouts

## **Issues and Opportunities:**

- Final invoice or financial reports;
- Ensuring all costs have posted properly;
- Deactivating the award account;
- Meeting deadlines and managing the time from award end date through final financial report end date;
- Monitoring to make sure what happened actually stayed on the project.

## **System or Data Issue:**

- Automating as much of this process as possible is key.
- Ongoing monitoring of closeout balances where by comparing cash received to amount billed.

# 13. Audits

## **Issues and Opportunities:**

- Having access to transactional information;
- Justifications in the proposal budget narrative and not made up after-the-fact to support the audit inquiry;
- Reasonable auditors.

## **System or Data Issue:**

- Has an audit role been created for the system?
- Are you documenting off-process validation items?

# Recommendations

# Critical Success Factors

1. Know what's impacting your data
2. Fix source data issues where possible
3. Convince leadership to tackle the big problems
4. Reconcile your accounts on an ongoing basis
5. Document your own billing actions
6. Independent verification from sponsor systems
7. Don't compound the problem by creating new journal entries that really fix the underlying data issues
8. Apply credits in the subsystems where possible
9. Follow good accounting practices
10. Stay focused and "fight the good fight!"

# Approach to Correct the Underlying Data Issues

- Feasibility Assessment
  - Perform a Gap-Fit Analysis of the Current State vs. Future State;
  - Use data to make an honest assessment of the current state:
    - Who are your people in the current roles?
    - What processes are they performing and how well are they performing them?
    - Is your technology flexible enough to accommodate the future state?
- Design a System that would work at your institution
  - Every university has a different culture and ability/inability to adapt to change
- Develop a Project Plan that includes all steps necessary to deploy the new System
- Staff your Project Team with internal or external resources to make the project a success

# Approach to Correct the Underlying Data Issues (continued)

- Form a Requirements Gathering Team to determine from the system in the future state;
- Establish project timeline that is reasonable and realistic to achieve;
- Manage the project using Project Management Body of Knowledge (PMBOK) standards for good project management;
- Communicate throughout the life of the project in order to identify and resolve issues as they arise;



# Approach to Correct the Underlying Data Issues (continued)

- Commit to providing value in the new system vs. removing familiar services—this will have a big impact on acceptance of the new system;
- Measure customer satisfaction in the future state and compare those metrics to customer satisfaction surveys conducting using the legacy systems;
- Document processes rather than relying on word-of-mouth knowledge of transaction processing—this transparency will reflect in better service and less frustration accompanied with the new system;
- Vet your design of system security roles with audit experts to analyze effectiveness of internal controls;

# Concluding Discussion

# Contact Information



**Operating at the intersection of  
experience and innovation.**

**Robert Cohen**  
**Senior Manager, Attain, LLC**  
Phone: 917.881.5482  
[rjcohen@attain.com](mailto:rjcohen@attain.com)

**Martin Smith**  
**Manager, Attain, LLC**  
Phone: 267.259.5865  
[mbsmith@attain.com](mailto:mbsmith@attain.com)

**Attain, LLC**  
**Higher Education and Academic Medical Centers**  
1600 Tysons Boulevard, Suite 1400  
McLean, VA 22102  
703.857.2200  
[education@attain.com](mailto:education@attain.com)  
[www.attain.com](http://www.attain.com)



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